

REMARKS

Applicant thanks the Examiner for the careful consideration of this application. Claims 1-21 and 23-27 are currently pending. Claims 1 and 20 have been amended. Based on the foregoing amendments and the following remarks, the Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Rejections under 35 U.S.C. §§ 102 and 103

(1) The Office Action rejected claims 1, 3-7, 11-21, and 23-27 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,554,408 to Miki et al. (“Miki”). The Office Action also rejected claims 2, 9, and 10 under 35 U.S.C. § 103(a) as being obvious over Miki. Claims 1 and 20 are the independent claims. The Applicant respectfully traverses this rejection for the following reasons.

First, Miki does not disclose or render obvious “a distribution channel extending orthogonally to the delivery channels,” with “a plurality of ribs located in each distribution channel,” as recited by claim 1. Nor does Miki disclose or render obvious the similar recitation of claim 20. Referring to Miki’s FIG. 1, the Office Action apparently aligns the left-hand (narrow) portion of Miki’s ink channel 13 with the claimed “delivery channel,” and apparently aligns the right-hand (tapered and wide) portions of the ink channel 13 with the claimed “distribution channel.” Further, the Office Action aligns the lateral walls of the right-hand (wide) portion of the ink channel 13 with the claimed “ribs.” However, Miki’s ink channel 13 does not constitute both a “delivery channel” and a “distribution channel extending orthogonally to the delivery channel,” as claimed.

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Referring to Miki's FIG. 1, the ink channel 13 comprises a *single* channel that is tapered toward the pressure chamber 12, thereby increasing resistance against back flow into the ink inlet 16, and improving ink ejection. (See Miki at col. 5, ll. 38-49; FIG. 1, FIG. 12.) Even assuming, for the sake of argument, that the left-hand (narrow) portion of ink channel 13 and the right-hand (wide) portion of ink channel 13 can be considered separate channels, they are not "orthogonal" to one another, as claimed, but parallel to one another. (See Miki at FIG. 1.) Furthermore, Miki's ink inlet 16, which does extend orthogonally to the ink channel 13, fails to include the claimed "ribs." In view of the foregoing, Miki does not disclose or render obvious "a distribution channel extending orthogonally to the delivery channels," with "a plurality of ribs located in each distribution channel," as recited by claim 1, nor does it disclose or render obvious the similar recitation of claim 20.

Second, Miki does not disclose or render obvious "a distribution channel . . . having . . . a second edge aligned along the front of the silicon chip," as recited by claim 1. Nor does Miki disclose or render obvious the similar recitation of claim 20. The Office Action aligns the silicon substrate 17 of Miki's FIG. 1 with the claimed "silicon chip." The Office Action apparently aligns the right-hand portion of Miki's ink channel 13 with the claimed "distribution channel." However, no edge of the ink channel 13 (or the ink inlet 16) is aligned along the front of the silicon substrate 17. Rather, as shown in Miki's FIG. 1, the entire ink channel 13 (as well as the entire ink inlet 16) is displaced from the front of the silicon substrate. Therefore, Miki does not disclose or render obvious "a distribution channel . . . having . . . a second edge aligned along the front of the silicon chip," as recited by claim 1, nor does it disclose or render obvious the similar recitation of claim 20.

Third, Miki does not disclose or render obvious "a feeding duct for the ink, the feeding

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duct being in fluid communication with the front of the silicon chip,” as recited by claim 1. Nor does Miki disclose or render obvious the similar recitation of claim 20. The Office Action aligns the ink inlet 16 with the claimed “feeding duct.” The Office Action also aligns the silicon substrate 17 of Miki’s FIG. 1 with the claimed “silicon chip.” Referring to Miki’s FIG. 1, however, the ink inlet 16 is not in fluid communication with the front of the silicon substrate 17, as claimed. Rather, the ink inlet 16 is blocked from the front of the silicon substrate 17, by the substrate 17 itself, as shown in Miki’s FIG. 1. Therefore, Miki does not disclose or render obvious “a feeding duct for the ink, the feeding duct being in fluid communication with the front of the silicon chip,” as recited by claim 1, nor does it disclose or render obvious the similar recitation of claim 20.

The Applicant submits that claims 1 and 20 are patentable over Miki for at least the foregoing three reasons. Claims 2-7, 9-19, 21, and 23-27 depend variously from claims 1 and 20, and are patentable for at least the same reasons.

(2) The Office Action rejected claim 8 under 35 U.S.C. § 103(a) as being obvious over Miki in view of U.S. Patent No. 4,879,568 to Bartky et al. (“Bartky”). Claim 8 depends indirectly from claim 1, which as demonstrated above, is patentable over Miki. Bartky does not remedy the deficiencies of Miki. Accordingly, the Applicant submits that claim 1, and its dependent claim 8, are patentable over any reasonable combination of Miki and Bartky.

(3) The Office Action rejected claims 20, 21, and 23-27 under 35 U.S.C. § 103(a) as being obvious over Miki in view of U.S. Patent No. 6,347,861 to Tom et al. (“Tom”). Claim 20 is the independent claim. As demonstrated above, claim 20 is patentable over Miki for at least

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three reasons. Tom does not remedy the deficiencies of Miki. Accordingly, claim 20, and its dependent claims 21 and 23-27, are patentable over any reasonable combination of Miki and Tom.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant, therefore, respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

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Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

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